

What is claimed is:

1. A method of manufacturing a semiconductor element comprising:
a process of forming gate electrode having metallic silicide layer on a semiconductor substrate,
a process of decreasing grain boundaries on the surface of the metallic silicide at least a portion of which is exposed, and
a process of forming spacer consisting of oxide film on the side wall of gate electrode.
2. A method of manufacturing a semiconductor element according to Claim 1, wherein the process of decreasing said grain boundaries is a process of performing heat treatment to said metallic silicide layer in an atmosphere consisting of a chief element of nitrogen gas.
3. A method of manufacturing a semiconductor element according to Claim 1, wherein the process of decreasing said grain boundaries is a process of performing heat treatment to said metallic silicide layer in an atmosphere consisting of a chief element of argon gas.
4. A method of manufacturing a semiconductor element according to Claim 1, wherein the process of decreasing said grain boundaries is a process of performing heat treatment to said metallic silicide layer in an atmosphere consisting of a mixture gas of chief elements of nitrogen and ammonia.
5. A method of manufacturing a semiconductor element according to

Claim 1, wherein the process of decreasing said grain boundaries is a process of performing heat treatment to said metallic silicide layer in an atmosphere including oxidizable gas less than 100ppm.

6. A method of manufacturing a semiconductor element according to Claim 1, wherein said metallic silicide is tungsten silicide and the process of decreasing said grain boundaries is a process of performing heat treatment at temperature of 700 to 800°C for time of 30 to 40sec.
7. A method of manufacturing a semiconductor element according to Claim 1, wherein said metallic silicide is tungsten silicide and the process of decreasing said grain boundaries is a process of performing heat treatment in an atmosphere including ammonia of 1 to 3%.
8. A method of manufacturing a semiconductor element according to Claim 1, wherein the process of decreasing said grain boundaries is performed after performing a reduced pressure process.
9. A method of manufacturing a semiconductor element according to Claim 1; wherein the process of decreasing said grain boundaries is a process of heat treatment to said metallic silicide layer in an atmosphere including oxidizable gas, and performed after performing a reduced pressure process of making the oxidizable gas less than 100ppm.
10. A method of manufacturing a semiconductor element according to Claim 1, wherein said metallic silicide is tungsten silicide and the process of decreasing said grain boundaries is a process of heat treatment

performed at temperature 700 to 800°C and performed after performing a reduced pressure process performed at pressure of 13 to 65pa.